cis-10-Nonadecenoic Acid
Item No. 19749

CAS Registry No.: 73033-09-7
Formal Name: 10Z-nonadecenoic acid
Synonym: Nonadeca-10(Z)-enoic Acid
MF: C₁₉H₃₆O₂
FW: 296.5
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: As supplied, 1 year from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

cis-10-Nonadecenoic acid is supplied as a solution in ethanol. To change the solvent, simply evaporate the cis-10-nonadecenoic acid under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of cis-10-nonadecenoic acid in these solvents is approximately 30 mg/ml.

cis-10-Nonadecenoic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of cis-10-nonadecenoic acid should be diluted with the aqueous buffer of choice. cis-10-Nonadecenoic acid has a solubility of approximately 0.25 mg/ml in a 1:7 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

cis-10-Nonadecenoic acid is a C₁₉:1 monounsaturated fatty acid. It has been examined for potential antitumor activity and was reported to inhibit HL-60 cell proliferation with an IC₅₀ value of 295 µM and to prevent LPS-induced tumor necrosis factor production from mouse macrophages.¹ Furthermore, long-chain fatty acids, such as cis-10-nonadecenoic acid, have been shown to inhibit p53 activity.²

References